

**METHODS AND APPARATUS FOR QUERY REWRITE WITH  
AUXILIARY ATTRIBUTES IN QUERY PROCESSING OPERATIONS**

**Abstract**

Methods and apparatus are provided for rewriting queries during a database query  
5 processing operation to include auxiliary attributes not included in the original query, thus  
improving processing efficiency. For example, in one aspect of the invention, a  
technique for rewriting a query in a query processing operation includes the following  
steps. First, the query is processed in accordance with at least a portion of a data set,  
producing query results. Second, data attributes from the query results are analyzed.  
10 Finally, at least one new predicate from at least one auxiliary data attribute is appended  
on the query.